

MR#2023013 – VEIRS MILL ROAD BUS RAPID TRANSIT AND BICYCLE & PEDESTRIAN PRIORITY AREA (BIPPA) PROJECT MANDATORY REFERRAL

Description

Mandatory Referral review for two projects by the Montgomery County Department of Transportation: 1) the Veirs Mill Road Bus Rapid Transit (BRT) project, and 2) the Bicycle and Pedestrian Priority Area (BiPPA) project along Veirs Mill Road and Randolph Road.

NO. MR2023013

COMPLETED: 04-06-23

MCPB

Item No. 10

April 13, 2023

2425 Reddie Drive

Floor 13

Wheaton, MD 20902

SA	Stephen Aldrich, PE, Planner IV, Countywide Planning & Policy Division, Stephen.Aldrich@MontgomeryPlanning.org , (301) 495-4528
DA	David Anspacher, Multimodal Transportation Supervisor, Countywide Planning & Policy Division, David.Anspacher@MontgomeryPlanning.org , (301) 495-2191
	Jason Sartori, Chief, Countywide Planning & Policy Division, Jason.Sartori@MontgomeryPlanning.org , (301) 495-2172

LOCATION:

Veirs Mill Road between City of Rockville and Wheaton bus loop

MASTER PLAN

Veirs Mill Corridor Master Plan

APPLICANT

Montgomery County Department of Transportation

ACCEPTANCE DATE

February 1, 2023

REVIEW BASIS

Md. Land Use Article, Section 20-301, et seq.



Summary

- Montgomery County Department of Transportation project to construct Bus Rapid Transit (BRT) project from Montgomery College Rockville Campus to Wheaton Metrorail Station.
- Montgomery County Department of Transportation simultaneously advancing Bicycle and Pedestrian Priority Area (BiPPA) improvements along Veirs Mill Road and Randolph Road.
- Combined project will undergo Forest Conservation review through the Maryland Department of Natural Resources. This project received a confirmed Forest Conservation Exemption on March 9, 2023 (Exemption No. 42023165E) under Chapter 22A-5(f).
- The Planning Board review of a Mandatory Referral is advisory.
- Staff recommends the transmittal of comments to the Montgomery County Department of Transportation.

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SECTION 1

RECOMMENDATIONS

Staff recommends the transmittal of the following comments to the Montgomery County Department of Transportation:

- 1) A protected crossing should be added to the intersection of Veirs Mill Road with Arbutus Avenue, consistent with recommendations from the Veirs Mill Corridor Master Plan (VMCMP). Of the seven protected crossings identified in the VMCMP, this is the only crossing not addressed by this project or ongoing design activities by either MCDOT or MDOT SHA.
- 2) Modify the design at the intersection of Veirs Mill Road at Havard Street to provide a full traffic signal instead of a pedestrian hybrid beacon. A directional median opening should be constructed to allow eastbound left-turns on Veirs Mill Road to make a left-turn during a protected left-turn phase onto Havard Street. The intersection should provide a high-visibility crosswalk across Veirs Mill Road on the eastern side of the intersection. The Havard Street approach should be maintained as a right-out only approach. This will provide critical left-turn neighborhood ingress which now occurs through a shopping center at Gridley Road. In general, pedestrian crossings are also more likely to have driver compliance if there is some vehicular function for the signal.
- 3) Eliminate all obstructions in the proposed sidewalks and sidepaths, including utility poles, signs, hydrants, safety fences or other fixed physical obstructions and ensure that these elements are at least 2 feet from the sidewalk/sidepath edge. Some specific examples are provided in Comment 2 in Attachment C.
- 4) Provide sidepath width (10 feet wide) curb ramps and pedestrian refuges at the following crossings of Veirs Mill Road:
 - a. Aspen Hill Rd (east leg)
 - b. Arbutus Ave (west leg)
 - c. Robindale Drive (east & west legs)
 - d. Parkland Drive (east & west legs)
 - e. Havard Street (east leg)
 - f. Gridley Road (east & west legs)
 - g. Randolph Road (east & west legs)
 - h. Bushey Drive (west leg)
 - i. Ferrara Avenue (east & west legs)
 - j. Connecticut Avenue (east & west legs)
 - k. Norris Drive (east & west legs)
- 5) Where improvements are made to driveway access, strive to tighten overly wide driveways and improve differentiation within the right of way between the road elements (including sidewalks and sidepaths) and adjacent parking lots. In all cases, the elevation of sidewalks and sidepaths should be made at sidewalk/sidepath level whenever possible if right-of-way is available.
- 6) Where right-of-way is available along Veirs Mill Road, provide an 8-foot-wide street buffer between the street and sidewalks / sidepaths and a minimum 6-foot-wide street buffer where there are constraints, per the Town Center Boulevard and Boulevard street types in the Complete Streets Design Guide. Some specific examples are provided in Comment 5 in Attachment C.

- 7) Work with MDOT SHA to achieve revised posted speed limits more consistent with the target speeds recommended in the Veirs Mill Corridor Master Plan =. Between Havard Street and just east of Dalewood Drive, this would suggest a post-improvement posted speed of 25 mph and a graduated speed limit (35 mph) between Robindale Drive and Havard Street.
- 8) Provide high-visibility crosswalks on all four legs at the intersection of Veirs Mill Road with Twinbrook Parkway. Relocate the sidewalk at southeast corner to provide a buffer between the sidewalk and the curb.
- 9) Right-in/right-out driveways serving the Randolph Crossing Shopping Center, Stoney Mill Square Shopping Center, and Rock Creek Terrace should be narrowed to 24 feet, have tighter turn radii and the triangular porkchop islands should be eliminated.
- 10) Close the driveway to 4616 Adrian Street on Veirs Mill Road and relocate it to Adrian Street.
- 11) Relocate the sidepath behind the following stations:
 - a. Westbound Randolph Road BRT Station. This is a busy bus station for the BRT network and forcing through pedestrians and bicycles to cross directly in front of this BRT stop is a safety concern.
 - b. Eastbound Norris Drive eastbound BRT Station
- 12) At the Veirs Mill Road and Connecticut Avenue Intersection, widen all curb ramps at the northeast, northwest and southwest corners to sidepath width (10 feet) to accommodate proposed sidepaths. Also, widen the pedestrian refuge crossing to sidepath width (10 feet).
- 13) At the Veirs Mill Road and Connecticut Avenue Intersection, curb ramps should be aligned and sidewalks and sidepaths need to be improved at all four intersection corners. Since the channelized right-turn lanes are being eliminated on three of the four approaches and the fourth corner is being heavily modified, there is ample right-of-way at all intersection corners to provide 10-foot-wide default sidewalks (8 feet minimum) with an eight-foot-wide buffer and directional crosswalk ramps that are aligned with the crosswalk.
- 14) Provide a 6-foot-wide sidewalk with a 6-foot-wide street buffer along the south side of Veirs Mill Road to connect the eastbound Aspen Hill Road BRT Station with Parklawn Local Park, a distance of 310 feet.
- 15) Extend the sidewalk along the south side of Veirs Mill Road for approximately 130 feet from its terminus west of Rock Creek Terrace to Parklawn Park (sheet 63 in Attachment A).
- 16) MCDOT and Montgomery Parks must coordinate to ensure that design and construction of a new Twinbrook Connector bikeway alignment adjacent to the roadway will allow for continuity of community use of this important trail connection. MCDOT will submit for funding of the trail to include \$200K for design in FY24-25 and \$1.3M for construction in FY25-26 to allow Montgomery Parks to implement the design and construction of the relocated Twinbrook Connector Trail prior to the removal of the existing segment of this trail proposed.
- 17) Plans for work on parkland must be submitted to the M-NCPPC Department of Parks for review as part of the Park Construction Permit process to ensure that all work is performed in accordance with M-NCPPC standard details, specifications, and policies. No work on parkland may occur until an approved Park Construction Permit is issued for the project.
- 18) Improve pedestrian connectivity and safety between the Aspen Hill Road eastbound BRT Station / relocated Aspen Hill Road local bus stop and the Rock Creek Trail, sidewalk, and plaza by extending sidewalk around the back of the BRT station (a similar treatment is shown at the Montgomery College BRT Station). Sidewalk should be integrated into the existing park entryway plaza, existing Rock Creek Trail connection, and future Twinbrook Connector Trail confluence.

- 19) Incorporate grading instead of retaining wall at Aspen Hill Road eastbound BRT Station (Station 1204+19 – 1204+74). See typical section 7, HT-04.
- 20) At Turkey Branch Parkway, modify the proposed sidewalk at Station 282+50 to include a curved radius, consistent with the existing sidewalk alignment.
- 21) Secondary comments included in Attachment C should also be considered by the applicant in modifying design elements of this project. The design projects under review will complete a substantial portion of the bicycle and pedestrian network along Veirs Mill Road, yet more work will be needed from the applicant in future projects to complete the missing segments.
- 22) Solicit funding to complete a Phase 2 of the Veirs Mill Road / Randolph Rd BiPPA Program
 - a. Reduce protected crossing spacing at these locations:
 - i. Arbutus Avenue, to reduce the 3,500-foot-long distance without a protected crossing between Aspen Hill Road and Robindale Drive
 - ii. Bushey Drive, to reduce the 1,900-foot-long distance without a protected crossing between Randolph Road and Ferrara Avenue
 - iii. Pendleton Drive, to reduce the 1,700-foot-long distance without a protected crossing between Claridge Road and Newport Mill Road
 - iv. Galt Avenue, to reduce the 2,500-foot-long distance without a protected crossing between Norris Drive and University Boulevard
 - b. Provide contra-flow bike lanes on Veirs Mill Road one-way service roads
 - i. Gaynor Road to Gridley Road – south side
 - ii. Randolph Road to Ferrara Avenue – south side
 - iii. Bushey Drive to Ferrara Avenue – north side
 - iv. Newport Mill Road to Sherrie Lane – north side
 - c. Implement neighborhood greenway projects that parallel Veirs Mill Road:
 - i. College View Drive
 - ii. Selfridge Road
 - iii. Paul Road
 - iv. Adrian Street
 - d. Complete the sidepath and separated bike lane networks on Veirs Mill Road.
 - e. Complete the sidepath along the north side of Randolph Road between Veirs Mill Road and the northern project extent at Bushey Drive.

SECTION 2

PROJECT DESCRIPTION

The Montgomery County Department of Transportation (MCDOT) is advancing plans for two major projects along the Veirs Mill Road corridor:

- Veirs Mill Bus Rapid Transit (BRT) Project
- Veirs Mill/Randolph Road Bicycle and Pedestrian Priority Area (BiPPA) Project

The department initially designed the two projects independently, however the applicant has recently combined them. For this reason, MCDOT will conduct one mandatory referral for these projects. However, this staff report retains the distinction between the two projects as the BiPPA components are funded for construction by Montgomery County, whereas the county is seeking funding for the BRT components. While the BRT project extends into the City of Rockville, this mandatory referral does not include the review of any portion of this project in the city.

Attachment A to this report provides 35 percent design plans for the projects.

Veirs Mill Road Bus Rapid Transit Project

The project proposes a new, 7.6-mile BRT service along MD 355 (Rockville Pike) and MD 586 (Veirs Mill Road) from the Montgomery College - Rockville Campus to the Wheaton Metrorail Station via the Rockville Metrorail Station. The transit service would provide a higher-speed, higher-frequency, premium transit bus service along the corridor to address the following needs:

1. System Connectivity: Creating a high-quality, east-west transit connection.
2. Travel Times and Reliability: Avoiding the traffic congestion that hinders bus mobility (speed and reliability), resulting in more predictable service and travel times.
3. Transit Demand/Attractiveness: Improving public transit for individuals who use it as their primary mode of transportation and make buses attractive to individuals who have access to other transportation options.
4. Livability: Creating a more reliable, integrated and accessible transportation network that enhances choices for transportation users; provides easy access to affordable housing, employment, and other destinations; and promotes positive effects on the surrounding community.

As currently proposed, the BRT project includes five main components:

- New, high-frequency BRT service in premium transit vehicles
- Dedicated bus lanes
- BRT stations
- Queue jump lanes
- Transit signal priority

This project represents one segment of a larger BRT network planned throughout Montgomery County. See Attachment B for more information on BRT, including an overview of BRT elements and a description of BRT in Montgomery County.

The proposed BRT improvements are illustrated in Figure 1.

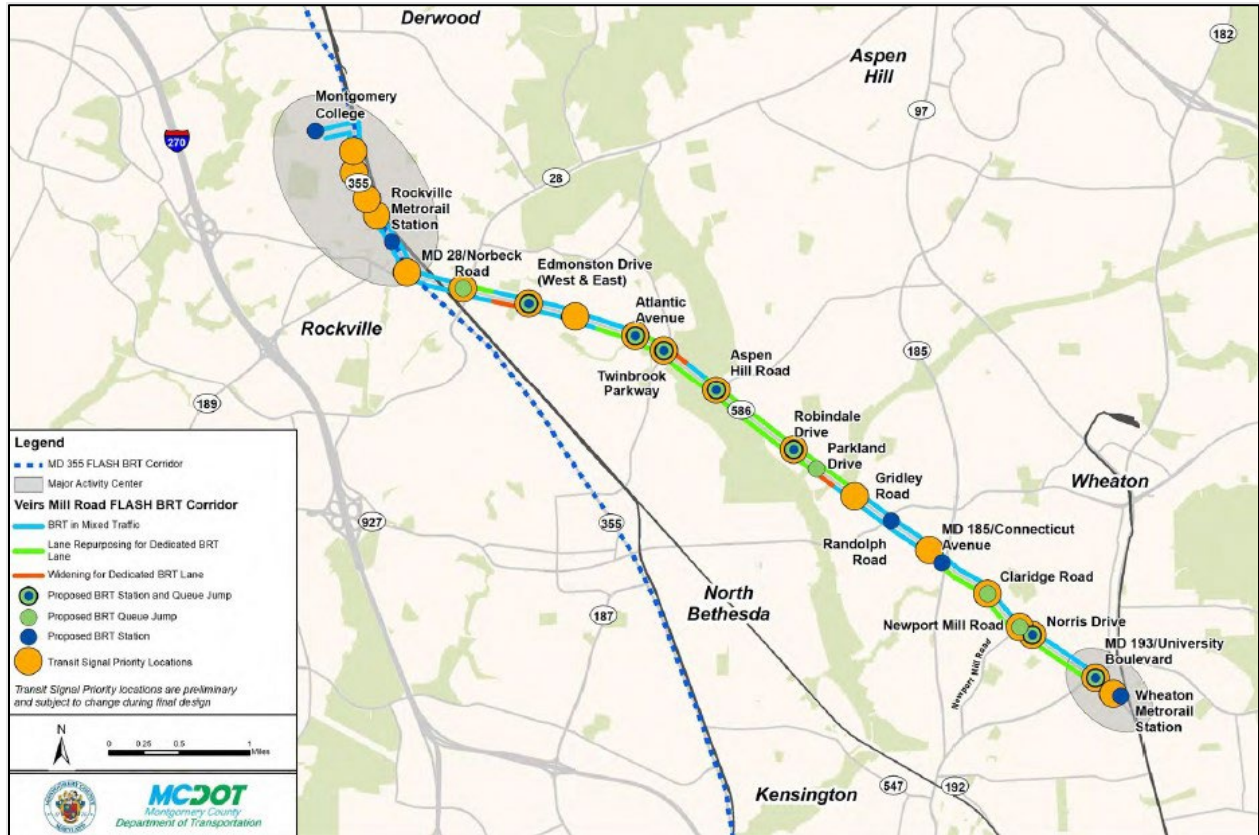


Figure 1: Detailed Network - Veirs Mill Road BRT Corridor

Bus Service

The BRT service would operate every 6 to 10 minutes during the AM and PM peak periods, likely 6:00 am to 9:00 am and 3:00 pm to 7:00 pm. During the off-peak periods, the BRT service would operate every 10 to 20 minutes. No BRT service would occur between midnight and 6:00 am.

The service would utilize premium transit vehicles that have similar characteristics to light rail vehicles: providing level boarding for strollers and riders with disabilities, multiple doors for efficient boardings and alightings, Wi-Fi and power outlets, and bicycle storage on board.

An example of a premium transit vehicle that currently operates on the US 29 corridor is shown in Figure 2.



Figure 2: US 29 FLASH Vehicle (Photo Credit: MCDOT)

Dedicated Bus Lanes

The BRT service will run in a mix of dedicated transit lanes adjacent to the curb and general traffic lanes. Space to accommodate the dedicated bus lanes will come from:

- Using existing bus lanes on Veirs Mill Road
- Converting some sections of traffic lanes to bus lanes
- Converting some sections of shoulder to bus lanes
- Limited road widening

An example of a curb bus lane is shown in Figure 3. Overall, the BRT service will run in dedicated bus lanes for 40 percent of its the route. An example of a curb bus lane is shown Figure 3.



Figure 3: Bus Lanes at the Germantown Transit Station (Photo Credit: The MoCo Show)

BRT Stations

The project proposes 12 BRT stations, including four in the City of Rockville and eight outside of the city. The bus stations will use a single shelter. All BRT stations, except for the Wheaton Metro BRT station, would include two platforms at each station location: one on eastbound Veirs Mill Road, and one on westbound Veirs Mill Road, depending on the location. All BRT stations would be located outside of the roadway pavement, within public right-of-way behind the existing shoulder or curb. The station platforms will typically be 56 feet long to accommodate one articulated bus. In some locations, a shorter 50-foot-long platform may be used to minimize potential impacts. These platform lengths will provide ADA-compliant ramps to access the platforms. Additionally, a glass windscreen is provided to enhance passenger comfort during inclement weather. A rendering of a typical BRT station is shown in Figure 4.



Figure 4: Typical BRT Station Rendering

A plan view that shows how the BRT station typically interacts with sidewalks and bikeways is shown below in Figure 5 for the Aspen Hill westbound BRT station showing the station sited adjacent to the curb and with a sidepath (or sidewalk at some locations) wrapping around the back side of the BRT station.

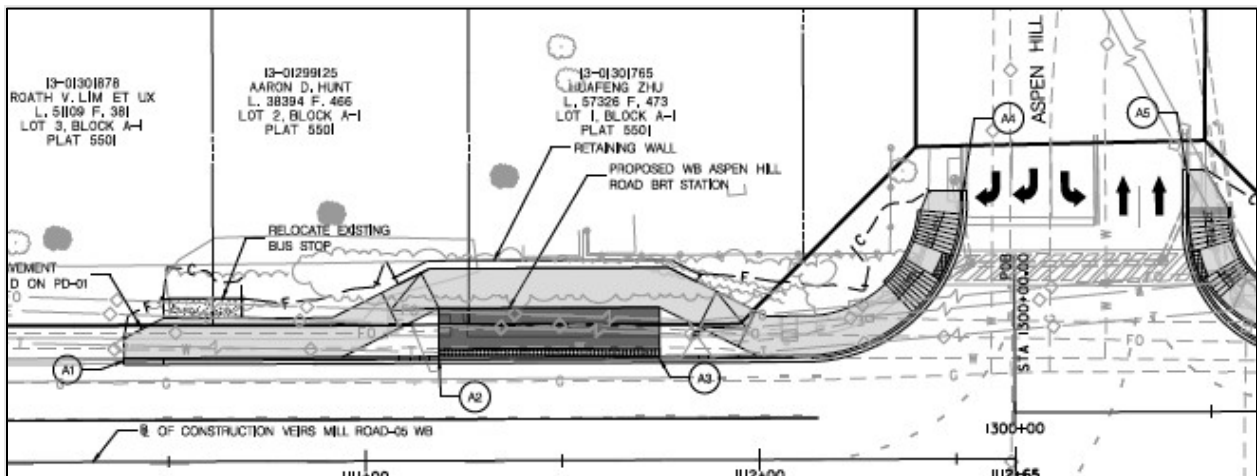


Figure 5: Aspen Hill WB BRT Station with Sidepath Wrapping Behind Station

Queue Jumps

Queue jumps are a short section of widened roadway or an existing right turn lane that allows BRT vehicles to bypass congestion or delays at intersections. Where dedicated bus lanes are not feasible, queue jump lanes are a means to improve travel times. Queue jump lanes will be provided at the 10 signalized intersections listed

below by widening the roadway, utilizing existing bus and right-turn only lanes, or repurposing existing right-turn only lanes:

- Veirs Mill Road at MD 28 (westbound only)
- Veirs Mill Road at Edmonston Drive (eastbound only)
- Veirs Mill Road at Atlantic Avenue
- Veirs Mill Road at Twinbrook Parkway
- Veirs Mill Road at Aspen Hill Road
- Veirs Mill Road at Robindale Drive
- Veirs Mill Road at Parkland Drive/Gaynor Road
- Veirs Mill Road at Newport Mill Road (eastbound only)
- Veirs Mill Road at Norris Drive (eastbound only)
- Veirs Mill Road at University Boulevard (eastbound only)

Transit Signal Priority

Transit Signal Priority (TSP) gives priority to BRT vehicles when certain conditions are met by either extending a green light or shortening a red light by a few seconds to allow an approaching BRT vehicle to pass through the intersection. It is provided at 19 locations along the corridor.

Pedestrian and Bicycle Improvements Project

While most pedestrian and bicycle improvements are included in the BiPPA component of the project, the Veirs Mill Road BRT project also includes pedestrian and bicycle improvements outside of the Council-designated BiPPA area, shown in Figure 6.

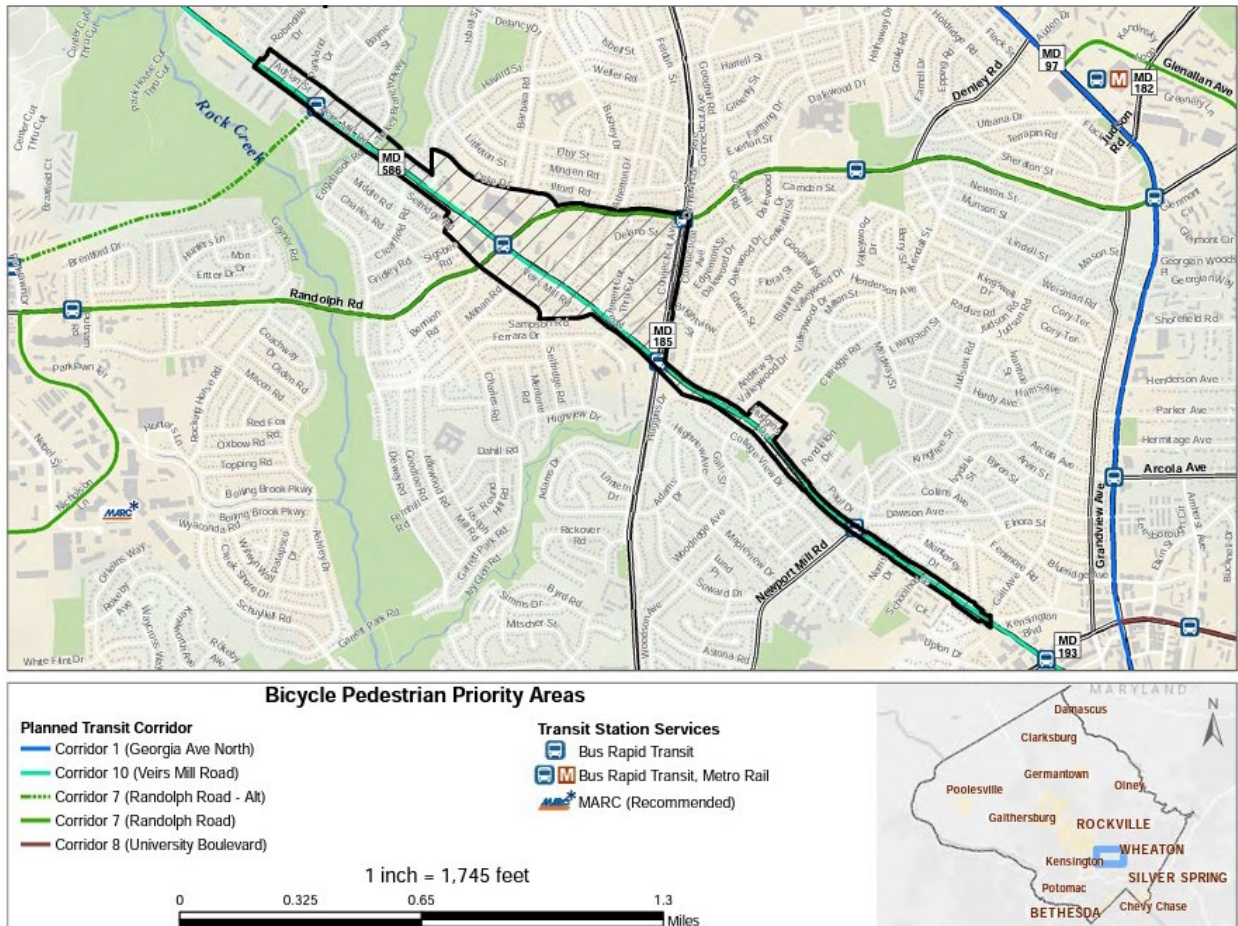


Figure 6: Veirs Mill - Randolph Road Bicycle and Pedestrian Priority Area

The combined project proposes extensive bicycle and pedestrian improvements, including:

- Construction of pedestrian hybrid beacons on Veirs Mill Road at Havard Street, Bushey Avenue, and Galt Avenue,
- Construction of a full traffic signal on Veirs Mill Road at Pendleton Road,
- Construction of 11,150 feet of sidepath (paths for walking and bicycling) improvements on the north side of Veirs Mill Road (see Table 1)
- Construction of 7,865 feet of sidewalk on the south side of Veirs Mill Road (see Table 2),
- Reconstruction of 2,500 feet of sidewalk on Randolph Road between Veirs Mill Road and Bushey Drive,
- Crosswalk and curb ramp improvements include the following major intersections:
 - north side of intersection of Veirs Mill Road and Twinbrook Parkway
 - intersections of Veirs Mill Road with Aspen Hill Road and Robindale Drive
 - intersection of Veirs Mill Road and Havard Street
 - intersections of Veirs Mill Road with Gridley Road and Randolph Road
 - intersection of Veirs Mill Road with Connecticut Avenue. Three of the four channelized right-turn lanes are to be removed
 - intersection of Veirs Mill Road and Norris Drive
 - on Veirs Mill Road at Galt Avenue

- Modification of the eastbound channelized right-turn lane on Veirs Mill Road at Connecticut Avenue to relocate the right-turn lane and change it from yield-controlled to signalized-controlled operation. By making this change, an existing yield-controlled midblock crossing of the right-turn lane will be eliminated.

Proposed pedestrian and bicycle improvements are summarized below for the north side of Veirs Mill Road in Table 1 and the south side of Veirs Mill Road in Table 2.

Table 1: Proposed Pedestrian and Bicycle Improvements on North Side of Veirs Mill Road

Road Segments	Length	Pedestrian/Bicycle Improvements	Street Buffer Width
Twinbrook Parkway to east 150' of intersection	150'	10' sidepath	6'
200' east of Aspen Hill Road to Robindale Drive	3,600'	10' sidepath	4'
Robindale Drive to Parkland Drive	970'	10' sidepath	11' to 25'
Parkland Drive to Turkey Branch Parkway	800'	10' sidepath	10'
Turkey Branch Parkway to Havard Street	1,030'	10' sidepath	10' *
Havard Street to Gridley Road	625'	10' sidepath	0-10'
Gridley Road to Randolph Road	500'	10' sidepath	0-4'
Randolph Road in front of McDonalds for 150'	225'	7' sidepath	5'
McDonalds site to Veirs Mill Service Road west of Bushey Drive	575'	8 to 9' sidepath	10' +
Veirs Mill Service Road west of Ferrara Avenue to Connecticut	775'	10' sidepath	Varies
Connecticut Avenue to Claridge Road	1,900'	10' sidepath	Varies
Total	11,150'		

* Pinch point near Turkey Branch Parkway and Matthew Henson Trail crosswalk has only a 2' buffer.

Table 2: Proposed Pedestrian and Bicycle Improvements on South Side of Veirs Mill Road

Road Segments	Distance	Pedestrian/Bicycle Improvements	Street Buffer Width
150' east of Robindale Drive to Rock Creek Terrace	450'	6' sidewalk	Wide
Gaynor Road to Gridley Road	2,640'	6' sidewalk	0'
300' east of Gridley Road to Randolph Road	200'	6' sidewalk	Varies
400' east of Connecticut Avenue to Connecticut Avenue	400'	6' sidewalk	0'
Connecticut Avenue to Dalewood Drive	250'	6' sidewalk	Wide
200' west of Claridge Road to 150' east of College View Drive	3,925'	6' sidewalk	0'
Total	7,865'		

Background

The Veirs Mill Road BRT and Veirs Mill Road BiPPA projects are the culmination of numerous studies over the past 30 years. The most recent studies include:

MD 586 / Veirs Mill Road Rapid Transit Study Draft Corridor Report (2016): This study was conducted by Maryland State Highway Administration (MDOT SHA) and evaluated several alternatives to improve travel along the Veirs Mill Road corridor, including:

- Alternative 1: No Build
- Alternative 2: Minor Improvements, including bus station enhancements, queue jump lanes and transit signal priority
- Alternative 3: Converting curb lanes to bus / right-turning vehicle lanes
- Alternative 5B: A two-way median transitway

The Planning Board reviewed the study on November 3, 2016 and recommended that the County Council selected Alternative 3 as the preferred alternative. In May 2017, the County Council selected a hybrid option (Alternative 2.5), which included segments of dedicated transit lanes with other minor improvements.

Veirs Mill Road (MD 586) Bus Rapid Transit Study: Final Corridor Study Report: In July 2018, MDOT SHA finalized the corridor study.

Bicycle and Pedestrian Priority Areas: Veirs Mill Road—Randolph Road Report: In July 2015, MCDOT completed this report that identifies a number of pedestrian and bicycle improvements in the area around the intersection of Veirs Mill Road and Randolph Road.

Veirs Mill Road Corridor Master Plan: In 2019, the Council approved the Veirs Mill Corridor Master Plan, which preserves and strengthens the communities of the Veirs Mill corridor by enhancing existing community resources, increasing connectivity and promoting safety in the public realm.

Subsequent Efforts: Planning and preliminary engineering work has continued since MCDOT became the project sponsor in fall 2019. The project is identified in the Metropolitan Washington Council of Governments (MWCOG) Visualize 2045 Long-Range Transportation Plan for the National Capital Region, as well as the Montgomery County Vision Zero: Zero Traffic Deaths in Montgomery County 2030 Action Plan/FY22-23 Work Plan (April 2021 Public Comment Draft 1.0). MCDOT is seeking a Capital Investment Grant (CIG) through the Federal Transit Administration's (FTA) Small Starts program to fund a portion of the project and has entered the Project Development phase of the CIG program.

Surrounding Neighborhood

Veirs Mill Road (MD 586) is a four to six-lane state divided highway providing direct connections between the City of Rockville and the Wheaton central business district. This road crosses over Rock Creek Park and Matthew Henson State Park in the western part of the corridor. Adjacent neighborhoods along Veirs Mill Road include Aspen Hill Park, Robindale, Stoney Brook, Stoney Brook Estates, Veirs Mill Village, Holiday Park, Connecticut Gardens, Connecticut Avenue Estates, Wheaton Woods, Wheaton Hills, College View, Monterrey Village and Kensington View. Predominant land use along Veirs Mill Road is residential between the Rockville line and

Havard Street, commercial between Havard Street and Bushey Drive, and residential between Bushey Drive and Galt Avenue, and commercial between Galt Avenue and Georgia Avenue (MD 97).

SECTION 3

MANDATORY REFERRAL AUTHORITY AND PROCESS

Mandatory Referral review is guided by the Montgomery Planning Mandatory Referral Review Uniform Standards (December 2022), and the authority granted through the Maryland Land Use Article, Section 20-301, et.seq. As set forth in Sections 20-301 and 20-302, the Montgomery County Planning Board has jurisdiction over mandatory referral projects presented by the federal government, State of Maryland, Montgomery County government, Montgomery County Board of Education, and public utilities, among others, for:

- (1) acquiring or selling land;
- (2) locating, constructing or authorizing a road, park, public way or ground, public building or structure, or public utility; or
- (3) changing the use of or widening, narrowing, extending, relocating, vacating or abandoning any of the previously mentioned facilities.

The Planning Board must review such projects and transmit comments on the proposed location, character, grade and extent of the activity to the project applicant.

As described in the Uniform Standards, the Planning Board considers all relevant land use and planning aspects of the proposal including, but not limited to, the following:

- (1) whether the proposal is consistent with the County's General Plan, functional plans, the approved and adopted area master plan or sector plan and any associated design guidelines, and any other public plans, guidance documents, or programs for the area;
- (2) whether the proposal is consistent with the intent and the requirements of the zone in which it is located;
- (3) whether the nature of the proposed site and development, including but not limited to its size, shape, scale, height, arrangement, design of structure(s), massing, setback(s), site layout, and location(s) of parking is compatible with the surrounding neighborhood and properties;
- (4) whether the locations of buildings and structures, open spaces, landscaping, recreation facilities, and pedestrian and vehicular circulation systems are adequate, safe, and efficient;
- (5) whether the proposal has an approved NRI/FSD and a preliminary SWM Concept Plan, and meets the requirements of the Forest Conservation law (Chapters 19 and 22A of the Montgomery County Code);
- (6) whether a Preliminary or a Final Water Quality Plan has been reviewed by the Planning Board if the project is in a Special Protection Area. In addition, for a Water Quality Plan on public property, the Board must determine if the plan meets any additional applicable standards for Special Protection Areas;
- (7) whether or not the site would be needed for park use if the proposal is for disposition of a surplus public school or other publicly-owned property; and
- (8) whether alternatives or mitigation measures have been considered for the project if the proposal is inconsistent with the General Plan or other plans and policies for the area, or has discernible negative impacts on the surrounding neighborhood, the transportation network, the environment, historic resources (including burial sites), or other resources.

SECTION 4

MANDATORY REFERRAL ANALYSIS AND FINDINGS

Master Plan Consistency

The design plans submitted by the applicant were reviewed for consistency with Thrive Montgomery 2050 (Montgomery County's general plan), functional master plans, area and sector plans. The following sections will conduct a review of the project in its conformance to key master plan elements in the following categories:

- Street and Transit Elements Review
- Pedestrian and Bicycle Elements Review
- Twinbrook Connector Trail
- Protected Crossings Review
- Historical Preservation Review

The VMCMP recommends short-term improvements and a long-term transformation of the corridor, including:

Short-Term Improvements:

- Implement school speed zone on Veirs Mill Road between Galt Avenue and Connecticut Avenue.
- Improve pedestrian infrastructure for the length of Veirs Mill Road and on residential streets that provide a connection between existing and proposed transit and to schools, parks and community facilities.
- Develop an interim continuous bicycle network along the residential service roads of Veirs Mill Road and on parallel streets to provide a connection between existing transit and community uses.
- Improve access to and quality of existing bus stops.
- Support the alignment and implementation of the short-term alternative for the Veirs Mill Road (MD 586) bus rapid transit.
- Introduce additional protected crossings that eliminate conflicts and have high rates of compliance.

Long-Term Transformation:

- Transform Veirs Mill Road into a multimodal complete street including dedicated lanes for bus rapid transit.
- Provide a sidepath on the north side of Veirs Mill Road that transitions to two-way separated bicycle lanes and a sidewalk at areas with commercial land use. Provide a combination of two-way separated bicycle lanes, sidepaths and sidewalks on the south side of Veirs Mill Road.
- Road. Provide bikeways on priority residential streets.

Figure 7 shows a typical cross section from the plan displaying the overall corridor vision with a re-imagining of Veirs Mill Road as a tree-lined transit boulevard with improved bicycle facilities and BRT lanes in both directions.

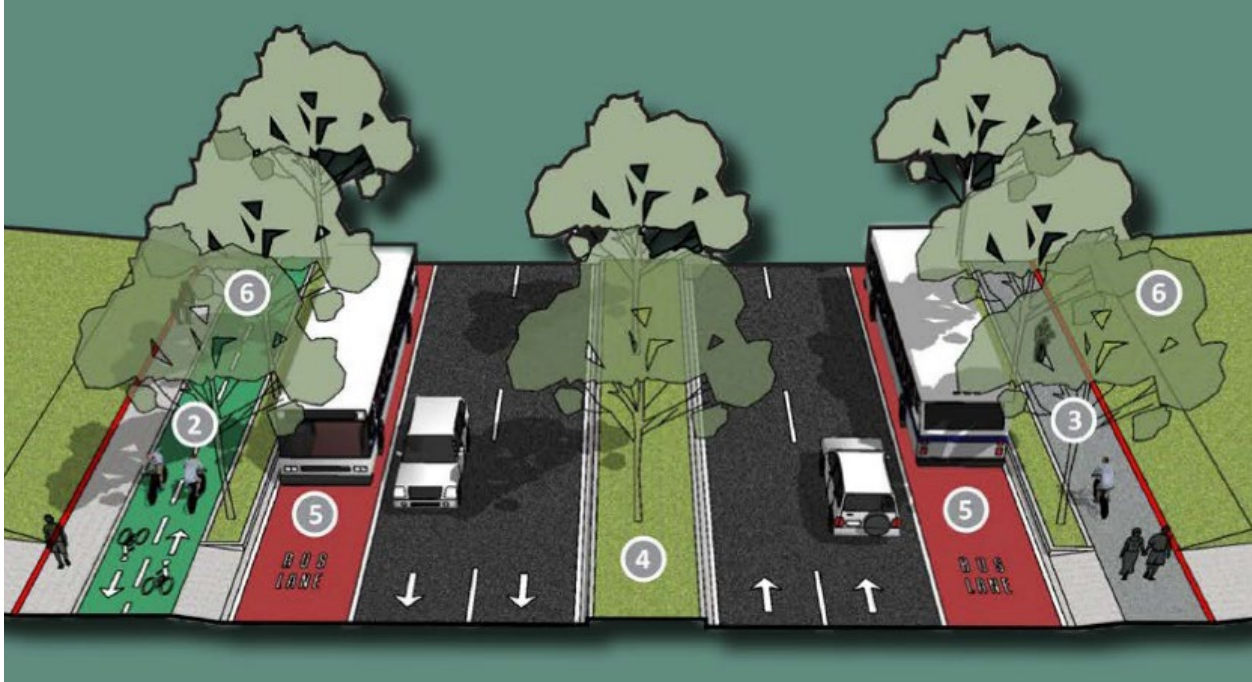


Figure 7: Veirs Mill Road Master Plan Cross Section Vision

Details regarding the short-term improvements and long-term transportation are included in the subsequent sections.

STREET AND TRANSIT ELEMENTS REVIEW

The VMCMP classifies Veirs Mill Road (MD 586) as a Boulevard between the Rockville line and Havard Street, as a Town Center Boulevard between Havard Street and Bushey Drive (within the Veirs Mill – Randolph Town Center), as a Boulevard between Bushey Drive and Galt Avenue, and as a Downtown Boulevard between Galt Avenue and Georgia Avenue (within Downtown Wheaton). It establishes short-term and long-term visions for the corridor. In the short term, Veirs Mill Road is recommended to have six lanes of traffic. In the long term, the road is converted to four lanes of traffic and two dedicated transit lanes.

The proposed design is a combination of the short term and long-term visions. The following transportation goals are provided in the VMCMP to transform Veirs Mill Road from a motor vehicle-dominated corridor to a safe, efficient and comfortable streets that serves pedestrians, bicyclists, transit users and motorists, and connects communities to transit, neighborhood uses and community facilities:

- Create a multimodal complete street corridor that increases safety and provides efficient travel through and across the corridor for all transportation modes.
- Enhance connectivity by improving safety and prioritizing improvements for pedestrians, bicyclists and transit users.
- Establish direct connections to existing and future transit, community facilities and neighborhood-serving uses.

Figure 8 shows the location of BRT stations recommended in the VMCMP. The Master Plan also included two recommendations for future study by the County in the development of the Veirs Mill Road BRT:

1. Evaluate proposed BRT station locations, [as shown in Figure 8], to prioritize those that have proximity to higher density land uses, have potential for near-term redevelopment and provide improved access to community facilities, and
2. Future planning and design studies should relocate the proposed BRT station from Parkland Drive to Robindale Drive. Also, if the existing garden-style apartments on Twinbrook Parkway or the Twinbrook Center in the City of Rockville is redeveloped, future planning and design studies for the long-term BRT alternative should evaluate the appropriate location of the BRT station at Twinbrook Parkway.

The design evaluated the location of all BRT stations and proposes a station at Robindale Drive instead of Parkland Drive. In addition, MCDOT has evaluated the siting of the Newport Mill Road station and determined that this station should shift to Norris Drive/ Monterrey Drive (recently signalized by MDOT SHA).

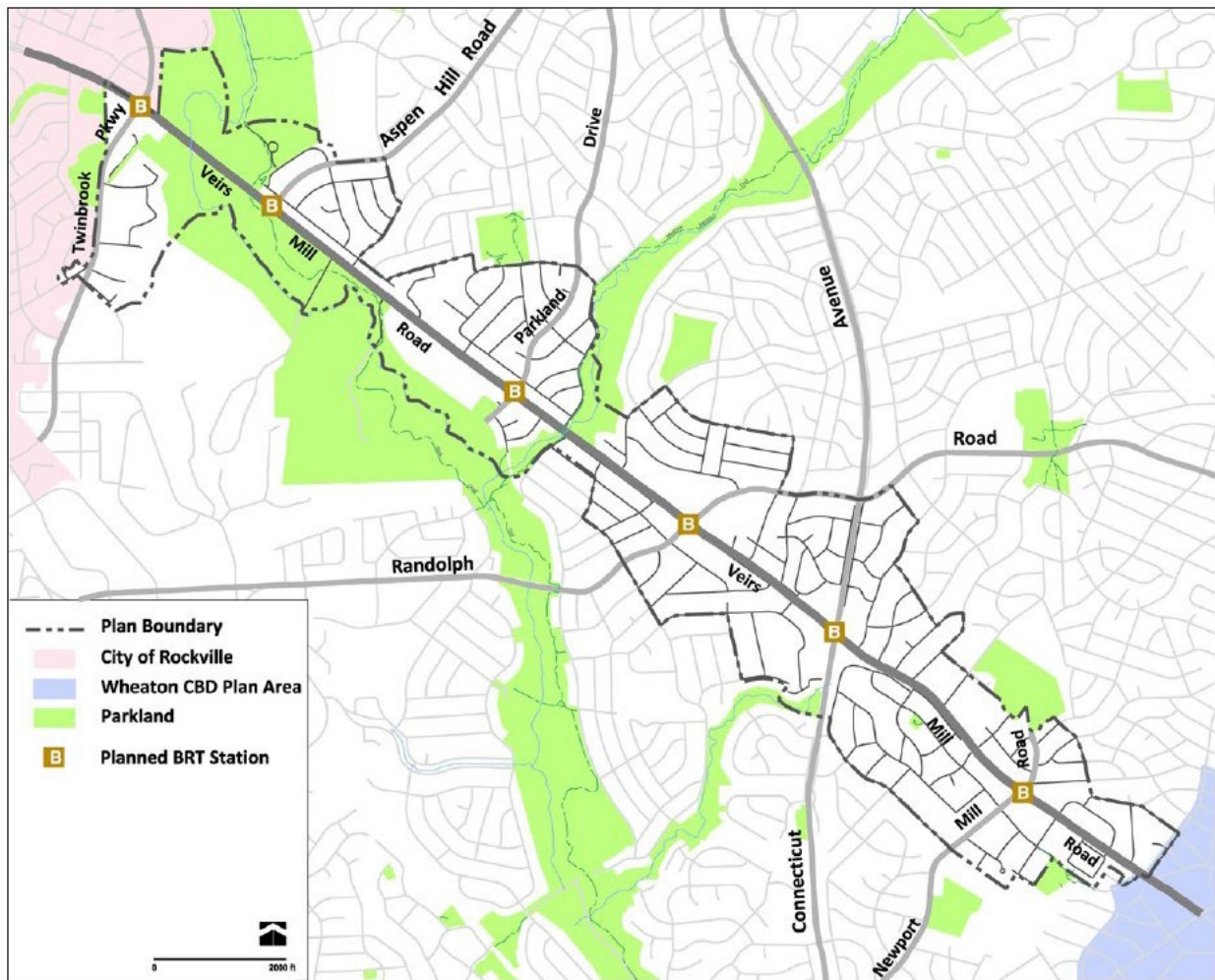


Figure 8: Master Planned Bus Rapid Transit Stations

The master plan also recommends target speeds (the speed we want motor vehicles to travel at) that are context-sensitive and safety focused. Table 3 provides a comparison between the existing posted speed limits and the master planned target speeds. In general, the western portion of the corridor and the Veirs Mill/ Randolph Road Town Center area (between Harvard Street and Bushey Drive) have the largest disparities between posted speed and target speed.

Table 3: Posted Speed/Target Speed Comparison

Veirs Mill Road Segments		Posted Speed Limit (mph)	Master-Planned Target Speeds (mph)
From	To		
Rockville Line	Havard Street	45	35
Havard Street	Bushey Drive	40	25
Bushey Drive	Dalewood Drive	40	35
Dalewood Drive	Galt Avenue	35	35
Galt Avenue	Georgia Avenue (MD 97)	25	25

BICYCLE AND PEDESTRIAN ELEMENTS REVIEW

The VMCMP proposes three types of pedestrian and bicycle improvements. These include:

- Sidewalks: A concrete path adjacent to the street that is typically 6 feet wide but as narrow as 5 feet wide intended for walking.
- Sidepaths: An asphalt path adjacent to the street that is typically 11 feet wide but as narrow as 8 feet wide and is intended for walking and bicycling.
- Two-Way Separated Bike Lanes: A two-way bikeway adjacent to the street that is typically 11 feet wide but as narrow as 8 feet wide and is intended for bicycling. This type of bikeway is typically accompanied by a sidewalk.

An image of a sidepath and separated bike lanes are shown in Figure 9.



Figure 9: Photos of Sidepath (left side) and Two-Way Separated Bike Lanes (right side)

Recognizing that many segments of the corridor lack even basic sidewalks and that implementing the full master plan vision may take many years to achieve, the VMCMP included both short-term and long-term pedestrian and bicycle recommendations.

Short Term Network – The short-term network focuses on pedestrian and bicycle improvements that were considered achievable in roughly a 5-to-10-year period.

North Side

- Twinbrook Parkway to Aspen Hill Road – sidepath
- Aspen Hill Road to Galt Avenue – sidewalk

South Side

- Twinbrook Parkway to Aspen Hill Road – trail
- Aspen Hill Road to Matthew Henson Trail – sidepath
- Matthew Henson Trail to Ferrara Drive – sidewalk
- Ferrara Drive to Glorus Place – two-way separated bike lanes
- Glorus Place to Galt Avenue – sidewalk

Long Term Network – The long-term network is the master planned vision for the corridor, and this includes bicycle and pedestrian facilities on both sides of Veirs Mill Road.

North Side

- City of Rockville line to Havard Street – sidepath
- Havard Street to Bushey Drive – two-way separated bike lanes
- Bushey Drive to Galt Avenue – sidepath

South Side

- City of Rockville line to Gaynor Drive – sidepath
- Gaynor Drive to Galt Avenue – two-way separated bike lanes

Table 4 and Table 5 show how the pedestrian and bicycle components of the project compares to existing conditions, the master plan’s short-term pedestrian and bicycle recommendations, and the master plan’s long-term recommendations. Locations where the long-term master plan vision is achieved with this project are shaded in green, and locations where the short-term master plan vision is achieved are shaded in blue. This project, while making progress all along the corridor, has focused on implementing the long-term bicycle and pedestrian recommendations on the north side of Veirs Mill Road. This project will achieve this between Aspen Hill Road and Havard Street, and between Ferrara Avenue and Claridge Road. The project is more successful in accomplishing the short-term bicycle and pedestrian network overall.

Along Randolph Road, the project is re-constructing the existing 6-foot-wide sidewalk with no significant changes to the street buffer on both sides of the road. This is inconsistent with the VMCMP, which recommends a sidepath on the north side of Randolph Road between Veirs Mill Road and Connecticut Avenue.

Table 4: North Side of Veirs Mill Road Corridor - Bicycle and Pedestrian Network

Road Segments		North Side			
From	To	Existing	Short-Term	Long-Term	Proposed
Twinbrook Pkwy	Aspen Hill Rd	Sidewalk	Sidepath	Sidepath	Sidewalk
Aspen Hill Rd	12732 Veirs Mill Rd	--	Sidewalk	Sidepath	Sidepath
12732 Veirs Mill Rd	Robindale Dr	--	Sidewalk	Sidepath	Sidepath
Robindale Dr	Parkland Dr	--	Sidewalk	Sidepath	Sidepath
Parkland Dr	Matthew Henson Trl	--	Sidewalk	Sidepath	Sidepath
Matthew Henson Trl	Havard St	--	Sidewalk	Sidepath	Sidepath
Havard St	Gridley Rd	Sidewalk	Sidewalk	Sep. Bike Lanes	Sidepath
Gridley Rd	Randolph Rd	Sidewalk	Sidewalk	Sep. Bike Lanes	Sidepath
Randolph Rd	Bushey Dr	Sidewalk	Sidewalk	Sep. Bike Lanes	Sidepath
Bushey Dr	Ferrara Ave	SW on Service Rd	SW on Service Rd	Sidepath	SW on Service Rd *
Ferrara Ave	Connecticut Ave	Sidewalk	Sidewalk	Sidepath	Sidepath
Connecticut Ave	Gail St	Sidewalk	Sidewalk	Sidepath	Sidepath
Gail St	Claridge Rd	Sidewalk	Sidewalk	Sidepath	Sidepath
Claridge Rd	Glorus Pl	Sidewalk	Sidewalk	Sidepath	Sidewalk
Glorus Pl	Newport Mill Rd	Sidewalk	Sidewalk	Sidepath	Sidewalk
Newport Mill Rd	Schoohouse Cir	SW on Service Rd	SW on Service Rd	Sidepath	SW on Service Rd
Schoohouse Cir	Sherrie Ln	SW on Service Rd	SW on Service Rd	Sidepath	SW on Service Rd
Sherrie Ln	Galt Ave	Sidewalk	Sidewalk	Sep. Bike Lanes	Sidewalk
Galt Ave	University Blvd	Sidewalk	Sidewalk	Sep. Bike Lanes	Sidewalk

* Segment includes both sidewalk on service road and sidewalk along Veirs Mill Road.

Table 5: South Side of Veirs Mill Road Corridor - Bicycle and Pedestrian Network

Road Segments		South Side			
From	To	Existing	Short-Term	Long-Term	Proposed
Twinbrook Parkway	Aspen Hill Rd	On-Road Trail	Trail	Trail	--
Aspen Hill Rd	12732 Veirs Mill Rd	--	Sidepath	Sidepath	--
12732 Veirs Mill Rd	Robindale Dr	Sidewalk	Sidepath	Sidepath	Sidewalk
Robindale Dr	Parkland Dr	Sidewalk	Sidepath	Sidepath	Sidewalk
Parkland Dr	Matthew Henson Trl	--	Sidepath	Sep. Bike Lanes	SW on Service Rd
Matthew Henson Trl	Havard St	--	Sidewalk	Sep. Bike Lanes	SW on Service Rd
Havard St	Gridley Rd	--	Sidewalk	Sep. Bike Lanes	Sidewalk
Gridley Rd	Randolph Rd	Sidewalk	Sidewalk	Sep. Bike Lanes	Sidewalk
Randolph Rd	Bushey Drive	--	Sidewalk	Sep. Bike Lanes	SW on Service Rd
Bushey Drive	Ferrara Ave	Sidewalk	Sidewalk	Sep. Bike Lanes	Sidewalk
Ferrara Ave	Connecticut Ave	Sidewalk	Sep. Bike Lanes	Sep. Bike Lanes	Sidewalk
Connecticut Ave	Gail St	Sidewalk	Sep. Bike Lanes	Sep. Bike Lanes	Sidewalk
Gail St	Claridge Rd	Sidewalk	Sep. Bike Lanes	Sep. Bike Lanes	SW on Service Rd
Claridge Rd	Glorus Pl	SW on Service Rd	Sep. Bike Lanes	Sep. Bike Lanes	Sidewalk
Glorus Pl	Newport Mill Rd	--	Sidewalk	Sep. Bike Lanes	Sidewalk
Newport Mill Rd	Schoohouse Cir	--	Sidewalk	Sep. Bike Lanes	Sidewalk
Schoohouse Cir	Sherrie Ln	SW on Service Rd	Sidewalk	Sep. Bike Lanes	Sidewalk
Sherrie Ln	Galt Ave	Sidewalk	Sidewalk	Sep. Bike Lanes	Sidewalk
Galt Ave	University Blvd	Sidewalk	Not in plan area	Sep. Bike Lanes	Not in plan area

The design projects under review will complete a substantial portion of the bicycle and pedestrian network along Veirs Mill Road, yet more work will be needed from the applicant in future projects to complete the missing segments.

TWINBROOK CONNECTOR TRAIL

A major impact of the proposed project is the elimination of the Twinbrook Connector Trail, which connects a trail from the Twinbrook area to the Rock Creek Trail via a short segment along the shoulder of Veirs Mill Road. The Twinbrook Connector Trail was conceived by Montgomery Parks as an interim solution to connecting the Twinbrook Connector trail on the west side of Rock Creek to the Rock Creek Trail at Aspen Hill Road. With the construction of BRT lanes, the existing shoulder in this section will be removed and the on-road trail will be eliminated. Figure 10 shows a photo of the existing Twinbrook Connector on-road trail.



Figure 10: Twinbrook Connector On-Road Trail along Veirs Mill Road

MCDOT and Montgomery Parks have been working together to address the elimination of the on-road section of the Twinbrook Connector trail that would occur as part of this project. The agencies have agreed that MCDOT will provide funding for Montgomery Parks to design and build a replacement trail. The intent is to have this replacement trail in place before the existing Twinbrook Connector Trail is removed as part of the Veirs Mill BRT improvements. Specifically, MCDOT will request \$200,000 for design in FY24-25 and \$1.3 million for construction in FY25-26 to allow Montgomery Parks to implement the design and construction of the relocated Twinbrook Connector Trail.

PROTECTED CROSSINGS REVIEW

A protected crossing is a crossing designed to improve the safety and comfort of pedestrians and bicyclists crossing the street with traffic control devices, such as full traffic signals and Pedestrian Hybrid Beacons (HAWK signals), that prohibit conflicting left turns and through vehicular movements. The VMCMP recommends protected crossings in the following order of priority:

- Veirs Mill Road and Andrew Street
- Veirs Mill Road and Norris Drive
- Veirs Mill Road and Arbutus Avenue
- Veirs Mill Road and Galt Avenue
- Veirs Mill Road and Bushey Drive
- Veirs Mill Road and Pendleton Drive
- Veirs Mill Road and Havard Street

The Complete Streets Design Guide also recommends the following maximum spacing standards for protected crossings:

- Town Center Boulevard: 600 feet
- Boulevard: 800 – 1600 feet

In 2022, MDOT SHA installed a full traffic signal at the intersection of Veirs Mill Road and Norris Drive. MCDOT is currently constructing a HAWK signal at the intersection of Veirs Mill Road and Andrew Street as part of a separate project.

The Veirs Mill Road BiPPA project proposes HAWK signals at the intersections with Havard Street, Bushey Drive and Galt Avenue and a full signal at the intersection with Pendleton Road. Therefore, only the intersection of Veirs Mill Road and Arbutus Avenue will lack a protected crossing.

Table 6 shows the spacing between projected crossings compared to Complete Streets Design Guide recommendations. The spacing is excessive at four locations, highlighted in grey in the table, though one is largely occupied by parkland and so pedestrian crossings will be limited.

Table 6: Spacing Between Protected Crossings

From	To	CSDG	Project	Achieves CSDG Spacing?
Twinbrook Parkway	Aspen Hill Road	800 – 1,600'	2,600'	No / Parkland
Aspen Hill Road	Robindale Drive	800 – 1,600'	3,500'	No
Robindale Drive	Parkland Drive	800 – 1,600'	1,000'	Yes
Parkland Drive	Turkey Branch Parkway	800 – 1,600'	1,000'	Yes
Turkey Branch Parkway	Havard Street	800 – 1,600'	1,000'	Yes
Havard Street	Gridley Road	600'	700'	Almost!
Gridley Road	Randolph Road	600'	500'	Yes
Randolph Road	Bushey Drive	600'	1,000'	No
Bushey Drive	Ferrara Avenue	800 – 1,600'	800'	Yes
Ferrara Avenue	Connecticut Avenue	800 – 1,600'	650'	Yes
Connecticut Avenue	Andrew Street	800 – 1,600'	1,000'	Yes
Andrew Street	Pendleton Drive	800 – 1,600'	850'	Yes
Pendleton Drive	Claridge Road	800 – 1,600'	800'	Yes
Claridge Road	Newport Mill Road	800 – 1,600'	700'	Yes
Newport Mill Road	Norris Drive	800 – 1,600'	650'	Yes
Norris Drive	Galt Avenue	800 – 1,600'	1,600'	Yes
Galt Avenue	University Boulevard	800 – 1,600'	900'	No

HISTORIC PRESERVATION REVIEW

The project will not impact any sites on the Master Plan for Historic Preservation. The road improvements associated with the project encroach into the environmental setting of the Veirs Mill Locational Atlas Site (#27/19) but will not impact the site's archaeological resources. A letter from the Historic Preservation supervisor determining the project is not a "substantial alteration" to the Veirs Mill site needs to be issued once plans are finalized; before beginning construction. A Historic Area Work Permit is not required for this project.

The Department of Transportation initiated the Section 106 review process to identify and assess the effects the project could have on historic resources. In the area of potential effects (APE), four properties are listed on the National Register of Historic Places – with three additional sites identified as eligible for listing. Sixteen other architectural resources were identified as potentially eligible for listing on the National Register but have not been evaluated. The County Historic Preservation Office will participate in this process as a consulting party and will continue to review the findings of the Department of Transportation as they are developed.

Transportation Best Practices

In addition to master plan conformance, there are many ongoing and approved guidelines and best practices that this project should seek to conform to, including the:

- Montgomery County Complete Streets Design Guide and related County Code regulations,
- Montgomery County Vision Zero Action Plan,
- Montgomery County Climate Action Plan,
- Montgomery Planning's Access Management Study (2021),
- Montgomery Planning's ongoing Bicycle Branding Study,
- Design guidance from the National Association of City Transportation Officials (NACTO), and
- Public right-of-way accessibility guidelines (PROWAG).

The Complete Streets Design Guide offers the following guidance for cross section design parameters:

- Street Buffers: 8 feet default; 6 feet minimum
- Sidewalks: 6 feet
- Sidepaths: 11 feet default; 8 feet minimum

Generally, the plans recommend sidepaths that vary from 8 to 11 feet wide, but just south of Randolph Road the sidepath is reduced to a width less than 8 feet wide. While this width does not meet minimal standards, widening it would eliminate many of the parking spaces at the McDonald's. Since this deficiency is for only a short distance, it is better to upgrade the sidepath width if / when the McDonald's redevelops. Sidewalks range from 5 feet to 6 feet wide. Street buffers vary greatly, with sidewalks and sidewalks directly adjacent to the curb in some locations.

Staff have developed comments to address both master planning and transportation best practices in the review of the 35 percent design plans submitted for mandatory referral review. While not detailed in this section, staff transportation comments are provided in Attachment C to this report. Comments have been summarized into Primary and Secondary Categories. A total of 28 comments are provided with 17 primary comments and 11 secondary comments.

One primary comment that we want to draw attention to is the siting of the Randolph Road westbound BRT Station. Figure 11 displays the plan view of this station. It shows that the sidepath will be located between the station and the road and therefore will also serve as a waiting location for passengers. Given the high ridership at this location, Planning staff is concerned about mixing bus passengers waiting at this station with the sidepath between the station and the curb. Efforts should be made to explore ways to modify this design to relocate the sidepath behind the station platform.

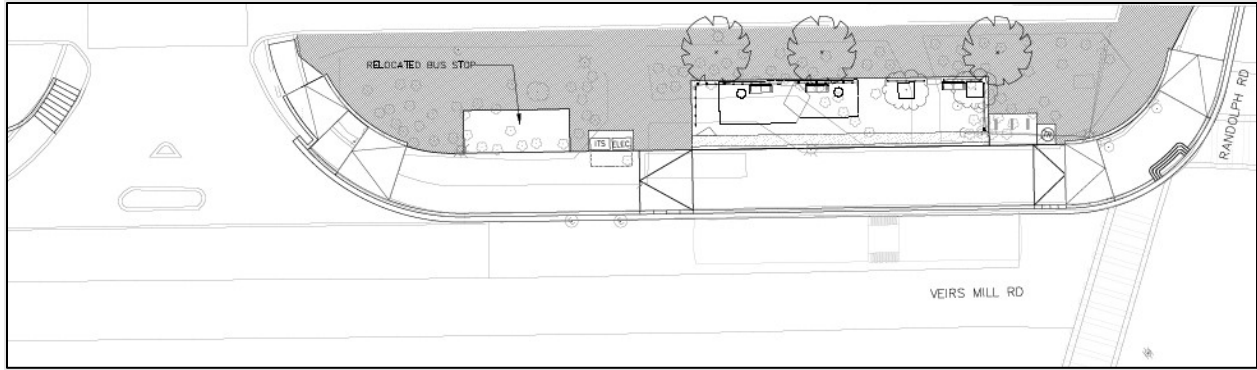


Figure 11: Randolph Road WB BRT Station

Montgomery Planning completed an Access Management Study in 2021 that looked at a traditionally auto-centric subject from a multimodal, Vision Zero perspective. Many of the county’s highway corridors have been over-designed for the car, and minimally designed for pedestrians and bicycles. Methods to minimize multimodal conflicts were stressed in the study, including limiting driveway access, where appropriate, along bikeway corridors, designing driveways to require slower turning speeds by tightening up the intersection geometry to match the target speed of the road. Another access management practice now in use in the county is limiting parcel access with frontage on two roads with different classifications to the lower classification street if feasible. The study also recommends that access decisions consider crash history and predictive safety tools. Some of these recommended practices were used in developing some of the secondary recommendations for the Veirs Mill BRT project.

Environment

There are minor impacts to stream buffers where the alignment crosses Turkey Branch and Rock Creek. These impacts are largely within the existing right-of-way for Veirs Mill Road. Section IV.A.1.b of the Planning Board’s Environmental Guidelines allows stream buffer encroachments from infrastructure uses bikeways and trails found to be necessary, unavoidable, and minimized by the Planning Department and Department of Parks staff working closely with the lead agency. Planning staff finds the buffer encroachments to be necessary and unavoidable, and that the disturbance has been minimized. MCDOT must acquire a Park Construction Permit for disturbance on Montgomery County park property outside of the Veirs Mill Road right-of-way. As submitted, the Mandatory Referral plans are in conformance with the Environmental Guidelines.

Forest Conservation

An exemption from Article II of Chapter 22A was confirmed by Planning Staff on March 9, 2023 (FC Exemption No. 42023165E) under Section 22A-5(f) because the Mandatory Referral project is “a governmental project reviewed for forest conservation purposes by the State Department of Natural Resources under the Code of Maryland Regulations.” As such, the project is in compliance with Montgomery County Chapter 22A. The Forest Conservation Exemption letter is included as Attachment D.

Stormwater Management

The initial stormwater management concept for this project has been reviewed by the Montgomery County Department of Permitting Services (MCDPS) and found acceptable. As engineering proceeds on the project, stormwater management practices for projects within the MDOT SHA will be reviewed, inspected, and maintained by MDOT SHA, to MDOT SHA standards. Sediment and erosion control plans will be reviewed for permitting by MCDPS. The Stormwater Concept Approval letter is included as Attachment E.

Sustainability

The project is designed to provide non-auto transportation alternatives that will help reduce automobile trips, along with their attendant pollution and carbon emissions. The BRT, bicycle and pedestrian facilities will largely be incorporated into the existing right-of-way for Veirs Mill Road, reducing impacts to natural resources and minimizing the addition of new impervious surfaces.

Parks Impacts

The proposed BRT improvements have both permanent and temporary impacts to three M-NCPPC Parks. In Rock Creek Stream Valley Unit #6, the new eastbound Aspen Hill Road BRT station, relocation of the existing local bus stop immediately south, and associated sidewalk connections would have a permanent impact along approximately 140 feet of the parkland frontage to Veirs Mill Road. The proposed sidepath and resulting culvert headwall extension, retaining wall, and safety fence on the north side of Veirs Mill Road at Turkey Branch Parkway would have a permanent impact along approximately 360 feet of the parkland frontage to Veirs Mill Road at Matthew Henson State Park Unit #1. A fiber optic re-alignment into the road at the proposed eastbound Aspen Hill Road BRT station in Rock Creek Stream Valley Unit #6 and adjustment of a PEPCO utility pole in Rock Creek Stream Valley Unit #7 near Twinbrook Parkway on the north side of Veirs Mill Road would have temporary impacts to parkland.

Additionally, the proposed eastbound BRT lane between Rock Creek and Aspen Hill Road would eliminate the master planned bicycle/pedestrian facility that is currently in the shoulder of Veirs Mill Road., connecting the Twinbrook Connector Trail to the Rock Creek Trail. Coordination between MCDOT and Montgomery Parks will be required to ensure that design and construction of a new bikeway alignment adjacent to the roadway will allow for continuity of community use of this important trail connection. MCDOT agrees to submit for CIP funding of the trail to include \$200,000 for design in FY24-25 and \$1.3 million for construction in FY25-26 as a separate standalone project. Once funding is secured by MCDOT, Montgomery Parks will take responsibility for design and construction implementation.

Any existing transportation/utility infrastructure proposed to be abandoned on M-NCPPC parkland must be removed as part of the proposed project. Any approved Commission parkland at Rock Creek Stream Valley Unit #6 proposed to be added to the Veirs Mill Road ROW would be conveyed to the MDOT SHA, as appropriate, in-fee. Financial compensation from the State for the in-fee conveyance will be required. Any land necessary for the Veirs Mill Road right-of-way at Matthew Henson State Park Unit #1 must be negotiated between the County and the State. This park is managed by the Commission, but is titled to the State, assigned to the use of MD DNR, and

under lease to Montgomery County. Parks will review for impacts to park infrastructure and natural resources by way of Park Permit at all these parks.

The project would be located primarily within existing transportation right-of-way but will require partial property acquisitions and temporary property acquisitions for construction easements where BRT or BiPPA improvements extend beyond the transportation ROW onto private and other Montgomery County-owned properties.

SECTION 5

RECOMMENDATIONS

Planning Staff recommends transmitting the following comments to MCDOT:

- 1) A protected crossing should be added to the intersection of Veirs Mill Road with Arbutus Avenue, consistent with recommendations from the Veirs Mill Corridor Master Plan (VMCMP). Of the seven protected crossings identified in the VMCMP, this is the only crossing not addressed by this project or ongoing design activities by either MCDOT or MDOT SHA.
- 2) Modify the design at the intersection of Veirs Mill Road at Havard Street to provide a full traffic signal instead of a pedestrian hybrid beacon. A directional median opening should be constructed to allow eastbound left-turns on Veirs Mill Road to make a left-turn during a protected left-turn phase onto Havard Street. The intersection should provide a high-visibility crosswalk across Veirs Mill Road on the eastern side of the intersection. The Havard Street approach should be maintained as a right-out only approach. This will provide critical left-turn neighborhood ingress which now occurs through a shopping center at Gridley Road. In general, pedestrian crossings are also more likely to have driver compliance if there is some vehicular function for the signal.
- 3) Eliminate all obstructions in the proposed sidewalks and sidepaths, including utility poles, signs, hydrants, safety fences or other fixed physical obstructions and ensure that these elements are at least 2 feet from the sidewalk/sidepath edge. Some specific examples are provided in Comment 2 in Attachment C.
- 4) Provide sidepath width (10 feet wide) curb ramps and pedestrian refuges at the following crossings of Veirs Mill Road:
 - a. Aspen Hill Rd (east leg)
 - b. Arbutus Ave (west leg)
 - c. Robindale Drive (east & west legs)
 - d. Parkland Drive (east & west legs)
 - e. Havard Street (east leg)
 - f. Gridley Road (east & west legs)
 - g. Randolph Road (east & west legs)
 - h. Bushey Drive (west leg)
 - i. Ferrara Avenue (east & west legs)
 - j. Connecticut Avenue (east & west legs)
 - k. Norris Drive (east & west legs)
- 5) Where improvements are made to driveway access, strive to tighten overly wide driveways and improve differentiation within the right of way between the road elements (including sidewalks and sidepaths) and adjacent parking lots. In all cases, the elevation of sidewalks and sidepaths should be made at sidewalk/sidepath level whenever possible if right-of-way is available.
- 6) Where right-of-way is available along Veirs Mill Road, provide an 8-foot-wide street buffer between the street and sidewalks / sidepaths and a minimum 6-foot-wide street buffer where there are constraints, per the Town Center Boulevard and Boulevard street types in the Complete Streets Design Guide. Some specific examples are provided in Comment 5 in Attachment C.
- 7) Work with MDOT SHA to achieve revised posted speed limits more consistent with the target speeds recommended in the Veirs Mill Corridor Master Plan =. Between Havard Street and just east of Dalewood

Drive, this would suggest a post-improvement posted speed of 25 mph and a graduated speed limit (35 mph) between Robindale Drive and Havard Street.

- 8) Provide high-visibility crosswalks on all four legs at the intersection of Veirs Mill Road with Twinbrook Parkway. Relocate the sidewalk at southeast corner to provide a buffer between the sidewalk and the curb.
- 9) Right-in/right-out driveways serving the Randolph Crossing Shopping Center, Stoney Mill Square Shopping Center, and Rock Creek Terrace should be narrowed to 24 feet, have tighter turn radii and the triangular porkchop islands should be eliminated.
- 10) Close the driveway to 4616 Adrian Street on Veirs Mill Road and relocate it to Adrian Street.
- 11) Relocate the sidepath behind the following stations:
 - c. Westbound Randolph Road BRT Station. This is a busy bus station for the BRT network and forcing through pedestrians and bicycles to cross directly in front of this BRT stop is a safety concern.
 - d. Eastbound Norris Drive eastbound BRT Station
- 12) At the Veirs Mill Road and Connecticut Avenue Intersection, widen all curb ramps at the northeast, northwest and southwest corners to sidepath width (10 feet) to accommodate proposed sidepaths. Also, widen the pedestrian refuge crossing to sidepath width (10 feet).
- 13) At the Veirs Mill Road and Connecticut Avenue Intersection, curb ramps should be aligned and sidewalks and sidepaths need to be improved at all four intersection corners. Since the channelized right-turn lanes are being eliminated on three of the four approaches and the fourth corner is being heavily modified, there is ample right-of-way at all intersection corners to provide 10-foot-wide default sidewalks (8 feet minimum) with an eight-foot-wide buffer and directional crosswalk ramps that are aligned with the crosswalk.
- 14) Provide a 6-foot-wide sidewalk with a 6-foot-wide street buffer along the south side of Veirs Mill Road to connect the eastbound Aspen Hill Road BRT Station with Parklawn Local Park, a distance of 310 feet.
- 15) Extend the sidewalk along the south side of Veirs Mill Road for approximately 130 feet from its terminus west of Rock Creek Terrace to Parklawn Park (sheet 63 in Attachment A).
- 16) MCDOT and Montgomery Parks must coordinate to ensure that design and construction of a new Twinbrook Connector bikeway alignment adjacent to the roadway will allow for continuity of community use of this important trail connection. MCDOT will submit for funding of the trail to include \$200K for design in FY24-25 and \$1.3M for construction in FY25-26 to allow Montgomery Parks to implement the design and construction of the relocated Twinbrook Connector Trail prior to the removal of the existing segment of this trail proposed.
- 17) Plans for work on parkland must be submitted to the M-NCPPC Department of Parks for review as part of the Park Construction Permit process to ensure that all work is performed in accordance with M-NCPPC standard details, specifications, and policies. No work on parkland may occur until an approved Park Construction Permit is issued for the project.
- 18) Improve pedestrian connectivity and safety between the Aspen Hill Road eastbound BRT Station / relocated Aspen Hill Road local bus stop and the Rock Creek Trail, sidewalk, and plaza by extending sidewalk around the back of the BRT station (a similar treatment is shown at the Montgomery College BRT Station). Sidewalk should be integrated into the existing park entryway plaza, existing Rock Creek Trail connection, and future Twinbrook Connector Trail confluence.
- 19) Incorporate grading instead of retaining wall at Aspen Hill Road eastbound BRT Station (Station 1204+19 – 1204+74). See typical section 7, HT-04.

- 20) At Turkey Branch Parkway, modify the proposed sidewalk at Station 282+50 to include a curved radius, consistent with the existing sidewalk alignment.
- 21) Secondary comments included in Attachment C should also be considered by the applicant in modifying design elements of this project. The design projects under review will complete a substantial portion of the bicycle and pedestrian network along Veirs Mill Road, yet more work will be needed from the applicant in future projects to complete the missing segments.
- 22) Solicit funding to complete a Phase 2 of the Veirs Mill Road / Randolph Rd BiPPA Program
 - b. Reduce protected crossing spacing at these locations:
 - i. Arbutus Avenue, to reduce the 3,500-foot-long distance without a protected crossing between Aspen Hill Road and Robindale Drive
 - ii. Bushey Drive, to reduce the 1,900-foot-long distance without a protected crossing between Randolph Road and Ferrara Avenue
 - iii. Pendleton Drive, to reduce the 1,700-foot-long distance without a protected crossing between Claridge Road and Newport Mill Road
 - iv. Galt Avenue, to reduce the 2,500-foot-long distance without a protected crossing between Norris Drive and University Boulevard
 - c. Provide contra-flow bike lanes on Veirs Mill Road one-way service roads
 - i. Gaynor Road to Gridley Road – south side
 - ii. Randolph Road to Ferrara Avenue – south side
 - iii. Bushey Drive to Ferrara Avenue – north side
 - iv. Newport Mill Road to Sherrie Lane – north side
 - d. Implement neighborhood greenway projects that parallel Veirs Mill Road:
 - i. College View Drive
 - ii. Selfridge Road
 - iii. Paul Road
 - iv. Adrian Street
 - f. Complete the sidepath and separated bike lane networks on Veirs Mill Road.
 - g. Complete the sidepath along the north side of Randolph Road between Veirs Mill Road and the northern project extent at Bushey Drive.

SECTION 6

COMMUNITY OUTREACH

After staff accepted the Mandatory Referral for review, Montgomery Planning notified local civic and homeowner's associations and other interested parties of this proposal. The Montgomery County Department of Transportation has been working on the planning and design of the Veirs Mill Road Bus Rapid Transit project since 2015. Community outreach opportunities provided for this project include the following:

- September 2020 BRT Study [Open House](#)
- Ten Corridor Advisory Committee meetings for the BRT project between 2015 and 2021 (documents from these meetings can be accessed using the following [link](#))
- October 3, 2022 [Community Meeting](#) (Veirs Mill Road Bicycle & Pedestrian Improvements) – Hybrid – in-person and virtual

SECTION 7

CONCLUSION

Based on information provided by the Applicant, Planning Staff recommends the transmittal of comments in this staff report to the Montgomery County Department of Transportation. The Applicant is requested to reply in writing to the Planning Board, addressing all comments.

ATTACHMENTS

Attachment A: 35 Percent Design Plans

Attachment B: Glossary of Bus Rapid Transit Components

Attachment C: Planning Staff Transportation Comments

Attachment D: Forest Conservation Exemption Letter

Attachment E: Stormwater Concept Approval Letters